

IN THE CLAIMS

Claims 1-25 (Canceled)

26. (currently amended) A process for making a container from a polyester(s) polymer, comprising feeding polyester particles having a degree of crystallinity of at least 15% and an It.V. of at least 0.70 dL/g to an extrusion zone, melting the particles in the extrusion zone to form a molten polyester polymer composition, and forming a sheet or a molded part from extruded molten polyester polymer, wherein the polyester particles fed to the extrusion zone have an It.V. at their surface which is less than 0.25 dL/g higher than the It.V. at their center and are not solid state polymerized before introducing said particles into the extrusion zone.

27. (original) The process of claim 26, wherein the It.V. at the surface of the particles is less than 0.20 dL/g higher than the It.V. at the center of the particles.

28. (original) The process of claim 27, wherein the difference between the It.V. of the particles at their surface and their center is 0.10 dL/g or less.

29. (original) The process of claim 28, wherein the difference is 0.05 dL/g or less.

30. (original) The process of claim 26, wherein the molded part is a container preform.

31. (original) The process of claim 30, comprising stretch blow molding the preform into a beverage container.

32. (original) The process of claim 31, wherein the container has a volume of 3 liters or less.

33. (original) The process of claim 27, comprising drying the particles in a drying zone at temperature of at least 140°C before melting the particles in the extrusion zone.

34. (original) The process of claim 26, further comprising drying the particles before feeding the particles to the extrusion zone, wherein the particles are not solid state polymerized before drying.

35. (original) The process of claim 34, wherein the particles have an acetaldehyde level of 10 ppm or less prior to melting in the extrusion zone.

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36. (original) The process of claim 26, wherein the polyester polymer particles comprise:

(a) a carboxylic acid component comprising at least 90 mole% of the residues of terephthalic acid, or derivatives of terephthalic acid, or mixtures thereof, and

(b) a hydroxyl component comprising at least 90 mole% of the residues of ethylene glycol,
based on 100 mole percent of the carboxylic acid component residues and 100 mole percent hydroxyl component residues in the polyester polymer, and at least 75% of the polyester polymer is virgin polymer.

37. (original) The process of claim 36, wherein the polyester polymer particles comprises:

(a) a carboxylic acid component comprising at least 92 mole% of the residues of terephthalic acid, or derivatives of terephthalic acid, or mixtures thereof, and

(b) a hydroxyl component comprising at least 92 mole% of the residues of ethylene glycol,
based on 100 mole percent of the carboxylic acid component residues and 100 mole percent hydroxyl component residues in the polyester polymer.

38. (currently amended) The process of claim ~~37~~ 36, wherein the degree of crystallinity is at least 25%.

39. (currently amended) The process of claim ~~26~~ 38, wherein the degree of crystallinity is at least 35%.

40. (original) The process of claim 26, comprising a bulk of said particles having a volume of at least 1 cubic meter.

Claims 41 – 53 (canceled)

54. (currently amended) The process of claim ~~53~~ 36, wherein the article formed from the polyester polymer composition in the extrusion zone is a preform.

55. (previously presented) The process of claim 54, wherein the preform is stretch blow molded into a beverage container.

56. (currently amended) The process of claim ~~26~~ 36, wherein the particles have an acetaldehyde level of 10 ppm or less prior to melting in the extrusion zone.

57. (previously presented) The process of claim 56, wherein the difference between the It.V. of the particles at their surface and at their center is 0.05 dL/g or less.

58. (previously presented) The process of claim 57, wherein the polyester particles introduced into the extrusion zone have a degree of crystallinity of at least 35 percent.

59. (currently amended) The process of claim ~~26~~ 36, wherein polyester particles having a degree of crystallinity of at least 25 percent and an It.V. of at least 0.75 dL/g obtained without solid state polymerization and having an It.V. at their surface which is less than 0.20 dL/g higher than the It.V. at the center of the particles are fed to said extrusion zone, melted to form said polyester polymer composition, and formed into a bottle preform.

60. (previously presented) The process of claim 59, wherein the degree of crystallinity is at least 35 percent, the It.V. is at least 0.77 dL/g.

61. (previously presented) The process of claim 60, wherein the difference between the It.V. of the particles at their surface is less than 0.05 dL/g higher than the It.V. at their center.

62. (new) A process for making a molded part comprising feeding to an extrusion zone polyester particles obtained from underwater pelletizers, melting the particles in the extrusion zone to form a molten polyester polymer composition, and forming a molded part from said molten polyester polymer composition, wherein said polyester particles fed to the extrusion zone have a degree of crystallinity of at least 15%, an acetaldehyde level of 10 ppm or less, an It.V. of at least 0.70 dL/g, and an It.V. at their surface which is less than 0.25 dL/g higher than the It.V. at their center, said polyester particles comprising polyester polymers obtained by reacting a diol comprising ethylene glycol with a dicarboxylic acid comprising terephthalic acid.

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63. (new) The process of claim 62, wherein the It.V. at the surface of the particles is less than 0.20 dL/g higher than the It.V. at the center of the particles.

64. (new) The process of claim 63, wherein the difference between the It.V. of the particles at their surface and their center is 0.10 dL/g or less.

65. (new) The process of claim 64, wherein the difference is 0.05 dL/g or less.

66. (new) The process of claim 62, wherein the molded part is a container preform.

67. (new) The process of claim 66, comprising stretch blow molding the preform into a beverage container.

68. (new) The process of claim 67, wherein the container has a volume of 3 liters or less.

69. (new) The process of claim 62, comprising drying the particles in a drying zone at a temperature of at least 140°C before melting the particles in the extrusion zone.

70. (new) The process of claim 62, wherein the particles are not solid state polymerized prior to feeding the particles to the extrusion zone.

71. (new) The process of claim 62, wherein the polyester polymer comprises:

(a) a carboxylic acid component comprising, a modifier carboxylic acid compound and at least 90 mole% of the residues of terephthalic acid, or derivatives of terephthalic acid, or mixtures thereof, and

(b) a hydroxyl component comprising at least 90 mole% of the residues of ethylene glycol, based on 100 mole percent of the carboxylic acid component residues and 100 mole percent hydroxyl component residues in the polyester polymer, and at least 75% of the polyester polymer is virgin polymer.

72. (new) The process of claim 71, wherein the polyester polymer comprises:

(a) a carboxylic acid component comprising a modifier carboxylic acid compound and at least 92 mole% of the residues of terephthalic acid, or derivatives of terephthalic acid, or mixtures thereof, and

(b) a hydroxyl component comprising at least 92 mole% of the residues of ethylene glycol,

based on 100 mole percent of the carboxylic acid component residues and 100 mole percent hydroxyl component residues in the polyester polymer.

73. (new) The process of claim 72, wherein the degree of crystallinity is at least 40%.

74. (new) The process of claim 62, wherein the degree of crystallinity is at least 40%.

75. (new) The process of claim 62, comprising a bulk of said particles having a volume of at least 1 cubic meter.

76. (new) The process of claim 62, wherein the molded part comprises a preform.

77. (new) The process of claim 76, wherein the preform is stretch blow molded into a beverage container.

78. (new) The process of claim 77, wherein the difference between the It.V. of the particles at their surface and at their center is 0.05 dL/g or less.

79. (new) The process of claim 78, wherein the polyester particles introduced into the extrusion zone have a degree of crystallinity of at least 40 percent.

80. (new) The process of claim 62, wherein the polyester particles comprise polyester polymers modified with a modifier carboxylic acid residues, and said particles are spherical, have a degree of crystallinity of at least 25 percent and an It.V. of at least 0.75 dL/g obtained without solid state polymerization and have an It.V. at their surface which is less than 0.20 dL/g higher than the It.V. at the center of the particles, and said molded part is a bottle preform.

81. (new) The process of claim 80, wherein the degree of crystallinity is at least 35 percent, the It.V. is at least 0.77 dL/g.

82. (new) The process of claim 81, wherein the difference between the It.V. of the particles at their surface is less than 0.05 dL/g higher than the It.V. at their center.

83. (new) A process for making a container from a polyester (s) polymer comprising feeding spherical polyester particles comprising said polyester polymer to an extrusion zone, melting the spherical polyester particles in the extrusion zone to produce a molten polyester polymer composition, and forming a molded part from the molten polyester polymer composition, wherein the spherical polyester particles are

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obtained from underwater pelletizers, said spherical particles having a degree of crystallinity of at least 35%, an It.V. of at least 0.70 dL/g, and an acetaldehyde level of 10 ppm or less, and an It.V. gradient at their surface which is less than 0.25 dL/g higher than the It.V. at their center.

84. (new) The process of claim 83, wherein the It.V. of the particles is at least 0.77 dL/g.

85. (new) The process of claim 84, wherein the difference between the It.V. of the particles of this surface and at their center is 0.10 dL/g or less.

86. (new) The process of claim 83, wherein the level of acetaldehyde in said particles is 2 ppm or less.

87. (new) The process of claim 84, wherein the pellets are crystallized at a temperature ranging from 140° C to 190° C.

88. (new) The process of claim 83, wherein the polyester polymer particles contain added acetaldehyde reducing compounds.

89. (new) The process of claim 83, wherein the polyester polymer particles are obtained by polycondensing in the presence of a titanium catalyst.

90. (new) The process of claim 83, wherein at least 75 weight % of the polyester polymer particles comprise virgin polyester polymer.

91. (new) The process of claim 83, wherein the particles are dried at a temperature of 140° C or more prior to melting.

92. (new) The process of claim 83, wherein said polyester polymer particles comprise polyester polymers containing residues of at least one of naphthalene-2,6-dicarboxylic acid, isophthalic acid, phthalic acid, or cyclohexane dibaroxylic acid.

93. The process of any one of claims 26-39, and 54-92, wherein said polyester polymer is obtained by a process comprising polycondensing a polymer melt in a finishing zone, and adding a phosphorus containing compound to the finishing zone.

94. The process of any of claims 26-39 and 54-92, wherein polyester polymer contains a metal deactivator.